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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. CONFIRMATION NO. | |
|---------------------------|-----------------------------|----------------------|--------------------------------------|---------------|
| 10/599,285 | 09/25/2006 | Christoph Briehn | WAS0807PUSA | 6497 |
| 22045 BROOKS KUS | 7590 06/07/201 HMAN P.C. | EXAMINER | | |
| 1000 TOWN C | ENTER | PAK, HANNAH J | | |
| TWENTY-SEC SOUTHFIELD: | | | ART UNIT | PAPER NUMBER |
| | | | 1796 | |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 06/07/2010 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| Office Action Summany | | Applicati | on No. | Applicant(s) | | | | |
|--|--|--|---|---|--------------|--|--|--|
| | | 10/599,2 | 85 | BRIEHN ET AL. | | | | |
| Office Action Summary | | | r | Art Unit | | | | |
| | | Hannah F | | 1796 | | | | |
| Period fo | The MAILING DATE of this communication or Reply | appears on th | e cover sheet with the c | orrespondence ad | idress | | | |
| WHIC - Exter after - If NO - Failu Any r | ORTENED STATUTORY PERIOD FOR RECHEVER IS LONGER, FROM THE MAILING IN INC. IN ITEM IN I | G DATE OF TI FR 1.136(a). In no even. eriod will apply and witatute, cause the app | HIS COMMUNICATION ent, however, may a reply be tin till expire SIX (6) MONTHS from blication to become ABANDONE | N. nely filed the mailing date of this c D (35 U.S.C. § 133). | | | | |
| Status | | | | | | | | |
| 1) 又 | Responsive to communication(s) filed on <u>(</u> | 01 March 2010 | | | | | | |
| · · | This action is FINAL . 2b) This action is non-final. | | | | | | | |
| = | , | | | | | | | |
| , | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Dispositi | on of Claims | | | | | | | |
| 4)🖂 | Claim(s) 11-21 is/are pending in the applic | ation. | | | | | | |
| • | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| | 5) Claim(s) is/are allowed. | | | | | | | |
| · · · · · · · · · · · · · · · · · · · | Claim(s) 11-21 is/are rejected. | | | | | | | |
| =" | Claim(s) is/are objected to. | | | | | | | |
| - | Claim(s) are subject to restriction a | nd/or election ı | equirement. | | | | | |
| Applicati | on Papers | | | | | | | |
| 9)□ | The specification is objected to by the Exar | miner. | | | | | | |
| | The drawing(s) filed on is/are: a)□ | | One objected to by the E | Examiner. | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | | |
| | Replacement drawing sheet(s) including the co | | | • • | FR 1.121(d). | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | |
| Priority u | ınder 35 U.S.C. § 119 | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | | | |
| a)[| ☐ All b) | | | | | | | |
| | 1. Certified copies of the priority documents have been received. | | | | | | | |
| | 2. Certified copies of the priority documents have been received in Application No | | | | | | | |
| | 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | | |
| | application from the International Bureau (PCT Rule 17.2(a)). | | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | |
| | | | | | | | | |
| Attachmen | t(s) | | | | | | | |
| 1) Notic | e of References Cited (PTO-892) | | 4) Interview Summary | (PTO-413) | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date Notice of Informal Patent Application | | | | | | | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 01/20/2010. 5) Notice of Informal Patent Application 6) Other: | | | | | | | | |

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DETAILED ACTION

1. All rejections, except for those maintained below, are withdrawn in light of applicants' remarks filed on 03/01/2010.

- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
- 3. No new grounds of rejection are set forth below. Thus, the following action is properly made final.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 11-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukushima et al. (US 6,306,502).

The rejection is adequately set forth in Pages 2-3 of Office action mailed on 12/03/2009 and is incorporated here by reference.

Response to Arguments

5. The applicants' arguments filed 03/01/2010 are fully considered but are not found persuasive for the following reasons below:

(A)

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Applicants' Argument: The applicants argue that none of the specific and preferred alkoxysilanes listed in Fukushima are the claimed functionalized alpha-silanes (see Pages 6 and 8 of the Applicants' Remarks).

<u>Examiner's Response:</u> **1)** Like the applicants, Fukushima discloses a coating having improved abrasion (scratch)-resistant property containing the organosilane compounds (Col. 3, lines 10-32) encompassed by the claimed structural formula as shown below:

Fukushima's organosilane

 $(X-R^1)_a$ -Si $(R^2)_b$ - $(OR^3)_{4-a-b}$

wherein X is CH_2 -CH-COO, R^1 is an alkylene group having 0-8 carbons, R^3 is an alkyl group having 1-8 carbons, a=1 and b=0.

=> (CH2=CH-C=O-O-alkylene 0-8 carbons)₁-Si-(O-alkyl 1-8 carbons)₃.

The claimed structural formula for the organosilane in reverse order

C-D-A-CR₂³-Si-(R²)_n(OR¹)_{3-n}

wherein C is an ethylenically unsaturated group, D is a carbonyl group, A is an oxygen group, R³ is a hydrocarbon having 1-12 carbons, R² is a hydrocarbon having 1-12 carbons, R¹ is a hydrocarbon group having 1-6 carbons, and n is 0.

=> (ethylenically unsat.-carbonyl group-O-(C-hydrocarbon 1-12 carbons)₂- Si-(O-hydrocarbon 1-6 carbons)₃

2) Moreover, contrary to the applicants' argument, Fukushima is not limited to its examples, such as the specific and preferred alkoxysilanes.

(B)

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Applicants' Argument: The applicants contend that the applicants satisfied the long felt need in the industry for scratch resistance coatings (see Pages 1 and 9 of the Applicants' Remarks). In support of this contention, the applicants rely on the Rule 132 declaration filed 03/01/2010 to provide proof that the claimed coating was widely accepted as satisfying the long felt need in the industry for scratch resistant coating (see Pages 2-3 of Rule 132 declaration filed 03/01/2010).

Examiner's Response: However, the declaration provides no objective evidence that the claimed scratch resistant coating satisfied the long felt need in the scratch resistant coating industry. Specifically, the applicants have not shown wide acceptance of the claimed coating in the industry for scratch resistant coating industry. Nor does the declaration show that such long felt need was not satisfied by Fukishima before the claimed invention since Fukushima also provides abrasion (or scratch) resistant coating which includes organosilanes encompassed by the claimed formula. See also MPEP § 716.02.

(C)

Applicants' Argument: The applicants contend that their claimed invention imparts unexpected results (see Pages 7 and 9 of the Applicants' Remarks). In support of this contention, the applicants rely on Rule 132 declaration filed 03/01/2010 to show Examiner's Response: 1) As recognized by the applicants in the declaration, the comparative example B (methacrylatopropyltrimethoxysilane of Fukushima) is encompassed by the broadly recited formula since the claimed hydrocarbon group containing 1-6 carbon atoms (R¹ group) can include the propyl group as shown by the

comparative example B. When the prior art fully describes the claimed invention, a showing of unexpected results cannot be the basis for patentability. 2) While the comparative example B provided in the prior art is said to show 24% loss of gloss, the applicants' own invention show loss of gloss up to 25 +/- 5 % in Table 1 of page 17 of the present specification. Thus, the applicants have not shown that the claimed invention imparts unexpected results. 3) The applicants have not shown why the limited showing in the examples from the declaration and pages 13-15 of the present specification is commensurate in scope with the degree of protection sought by the very broad claims of the instant application. For instance, while the examples are directed to a showing of only one type of organosilane, e.g., methacrylatomethyltrimethoxysilane, the claims are not so limited. The claim broadly cited formula for the organosilane compound includes numerous organosilane compounds.

Accordingly, the applicants fail to rebut the prima facie case of obviousness established in the record.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hannah Pak whose telephone number is (571) 270-5456. The examiner can normally be reached on Monday - alternating Fridays (7:30 am - 5 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hannah Pak

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Examiner Art Unit 1796

/HP/

/Vasu Jagannathan/ Supervisory Patent Examiner, Art Unit 1796